

REMARKS

Claims 53-111 are pending in the present application. Claims 1-52 are cancelled herein. Claims 92-111 have been added, and claims 53, 59-61, 64, 66, 67, 69, 73, 78-80, 83, 85, 86, and 88 have been amended herein to correct minor typographical errors. No new matter has been added.

Claims 73 and 86 have been objected to because of informalities. These informalities have been corrected herein.

The drawings have been objected to because “ground plane 214” is not identified in Fig. 2a. A replacement sheet containing the corrected Fig. 2a is included herewith.

Per the Examiner’s request, Applicants have included herewith a copy of “Pad-On-Circuit (PoC) Process and Its Applications,” to Kim et al., which was previously filed in an Information Disclosure Statement on June 15, 2004, so that it may be considered.

Claims 53-54, 56-59, 65-66, and 68-69 have been rejected under 35 U.S.C. § 103(a) as assertedly being unpatentable over U.S. Patent No. 6,943,294 to Kang (hereinafter “Kang”) in view of U.S. Patent Application Publication No. 2003/0227079 to Chia (hereinafter “Chia”). Claims 55 and 70-72 have been rejected under 35 U.S.C. § 103(a) as assertedly being unpatentable over Kang in view of Chia as applied to claims 53-54 above, and further in view of U.S. Patent Application Publication No. 2003/0160312 to Lo (hereinafter “Lo”). Claims 60-64 have been rejected under 35 U.S.C. § 103(a) as assertedly being unpatentable over Kang in view of Chia as applied to claims 53 and 56 above, and further in view of U.S. Patent No. 4,439,841 to Itoh (hereinafter “Itoh”). Claim 67 has been rejected under 35 U.S.C. § 103(a) as assertedly being unpatentable over Kang in view of Chia as applied to claims 53 and 66 above, and further in view of U.S. Patent Application Publication No. 2004/0126927 to Lin (hereinafter “Lin”).

Claims 73-78, 84-85, and 87-91 have been rejected under 35 U.S.C. § 103(a) as assertedly being unpatentable over Kang in view of Chia and Lo. Claims 73-78, 84-85, and 87-91 have been rejected under 35 U.S.C. § 103(a) as assertedly being unpatentable over Kang in view of Chia and Lo. Claims 79-83 have been rejected under 35 U.S.C. § 103(a) as assertedly being unpatentable over Kang in view of Chia and Lo and further in view of Itoh. Claim 86 has been rejected under 35 U.S.C. § 103(a) as assertedly being unpatentable over Kang in view of Chia and Lo and further in view of Lin. Applicants respectfully traverse these rejections.

Claim 53 of Applicants' application recites at least one distinguishing feature that is neither taught nor suggested by the references cited by the Office Action. For example, the references cited by the Office Action fail to teach or suggest "the first die having a top side with a redistribution layer that comprises re-routing lines that redistribute bond pads located on a right side and a left side of a first gap in an interior region to corresponding re-routed bond pads in a periphery region" or "the second die having a first side with a redistribution layer that comprises re-routing lines that redistribute bond pads located on a right side and a left side of a first gap in an interior region to corresponding re-routed bond pads in a periphery region."

The Office Action states, "Chia [Fig. 2] discloses a redistribution layer [24] that comprises conductive lines [26, 32] that redistribute bond pads [20c, 20d] located on a right side and a left side of a first gap in an interior region to corresponding re-routed bond pads [28] in a periphery region." This statement contained in the Office Action, however, is incorrect. Rather, Chia assertedly discloses a redistribution layer that includes conductive lines extending from *one die to an adjacent die*. (See, e.g., Chia, paragraph [0068]). For example, Fig. 2 of Chia contains four dies – 12a, 12b, 12c, and 12d. The redistribution layer 24 includes traces 32 *interconnecting bond pads on one die to bond pads on another die*.

In contrast, Applicants' claim 53 explicitly recites that the first die has a redistribution layer "that comprises re-routing lines that redistribute bond pads located on a right side and a left side of a first gap in an interior region to corresponding re-routed bond pads in a periphery region." Applicants' claim 53 further recites a similar limitation for the second die. Notably, the redistribution layer comprises re-routing lines that redistribute bond pads located in the interior region to re-routed bond pads in a periphery region *on each die*. This is not taught or suggest by Chia, which assertedly discloses interconnecting bond pads *across adjacent dies*.

Accordingly, Applicant respectfully requests that the rejections of claim 53 be withdrawn. Claims 54-72 depend from claim 53 and add further limitations. It is respectfully submitted that these dependent claims are allowable by reason of depending from an allowable claim as well as for adding new limitations.

Applicants' claim 73 includes similar limitations as those discussed above with reference to Applicants' claim 53, and accordingly, Applicants' respectfully submit that claim 73 is allowable over the cited references for at least some of the same reasons discussed above with reference to claim 53.

Claims 74-91 depend from claim 73 and add further limitations. It is respectfully submitted that these dependent claims are allowable by reason of depending from an allowable claim as well as for adding new limitations.

In view of the above, Applicants respectfully submit that the application is in condition for allowance and request that the Examiner pass the case to issuance. If the Examiner should have any questions, Applicants request that the Examiner contact Applicants' attorney at the address below. No fee is believed due in connection with this filing. However, in the event that

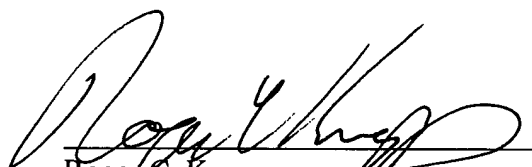
there are any fees due, please charge the same, or credit any overpayment, to Deposit Account
No. 50-1065.

Respectfully submitted,

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Date

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